

Work Order ID 75888

\*75888\*

Page 1

November-01-11 1:12:19 PM

Item ID: D407-649-011

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Hardpoint (6)

Start Date: 01/11/2011 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 15/11/2011 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals: Process Plan: M.L.J Date: 11/11/01 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

N/A

Rev N/A

100

0.00

\*100\*

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy blue file D407-649 and type labels per QSI 014

CHG001

S u 17/20

J L M L J 11-11-29  
①

110

Pick Kit

0.00

\*110\*

Packaging

Memo

0.00

Packaging

S p 11-11-29

120

QC4- 100% Inspect kits for completeness

0.00

\*120\*

QC

Memo

0.00

Quality Control

S u 17/20

②

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 75888****\*75888\***

Page 2

November-01-11 1:12:19 PM

Item ID: D407-649-011

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Hardpoint (6)

Start Date: 01/11/2011 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 15/11/2011 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
<b>*130*</b>	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D407-649-011 Location: _____ PPP Rev: _____								
140	QC21- Final Inspection - Work Order Release	0.00							
<b>*140*</b>									
QC	Memo	0.00							
Quality Control									

u 11/12/28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

November-01-11 1:12:23 PM

Page 1

Work Order ID: 75888

**\*75888\***

Parent Item: D407-649-011

**\*D407-649-011\***

Parent Item Name: Hardpoint (6)

Start Date: 01/11/2011

Required Date: 15/11/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:B98.12.07Changed location for step 2DM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

80-007-15-4A

Purchased

No

120

Each

0.0000

24

24

**\*80-007-15-4A\***

Insert

AN4-6A

Purchased

No

120

Each

5,788.000

24

24

**\*AN4-6A\***

Bolt

Location

Loc Qty

Loc Code

ST356

788

116924

8

117514

6

118628

274

118838

300

119127

200

ST516

5000

119017

5000

AN960JD416

NAS1149D0463J

Purchased

No

120

Each

0.0000

24

24

**\*AN960JD416\***

Washer

D2713

Manufactured

No

120

Each

10.0000

4

4

**\*D2713\***

Lug

Location

Loc Qty

Loc Code

ST479

10

36699

10

4x

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Page 2

November-01-11 1:12:23 PM

Work Order ID: 75888

**\*75888\***

Parent Item: D407-649-011

**\*D407-649-011\***

Parent Item Name: Hardpoint (6)

Start Date: 01/11/2011

Required Date: 15/11/2011

Start Qty: 1.00

Required Qty: 1.00

D2755-1 Manufactured No

120 Each 4.0000

**\*D2755-1\***

Lug

\*\*

Location

Loc Qty

Loc Code

ST479

4

17551

4

Manufactured No

120 Each 15.0000

D2755-2

**\*D2755-2\***

Lug

\*\*

Location

Loc Qty

Loc Code

ST487

15

14075

1

17552

4

48383

10

Manufactured No

120 Each 39.0000

D2756

**\*D2756\***

Inner-Doubler

\*\*

Location

Loc Qty

Loc Code

ST022

39

922

5

9235

34

Manufactured No

120 Each 6.0000

D2757

**\*D2757\***

Outer Doubler

\*\*

Location

Loc Qty

Loc Code

ST022

6

68798

6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Page 3

November-01-11 1:12:23 PM

Work Order ID: 75888

\*75888\*

Parent Item: D407-649-011

\*D407-649-011\*

Parent Item Name: Hardpoint (6)

Start Date: 01/11/2011

Required Date: 15/11/2011

Start Qty: 1.00

Required Qty: 1.00

M7885/2-4-1

Purchased

No

120

Each

209.0000

96

96

\*\*

SP

\*M7885/2-4-1\*

Rivet

Location

Loc Qty

Loc Code

ST393

209

110267

209

Purchased

No

120

Each

598.0000

126

126

\*\*

SP 11-11-29

M7885/3-4-2

\*M7885/3-4-2\*

Rivet

Location

Loc Qty

Loc Code

ST393

598

110267

598

26x

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



REFERENCE ONLY

IIN-D407-649

Page 8 of 8

## 6 PARTS LIST

Qty	Part Number	Description
X	D407-649-011	407 HARDPOINT KIT INSTALLATION
4	D2713	BRACKET
1	D2755-1	AFT BRACKET LH
1	D2755-2	AFT BRACKET RH
6	D2756	INNER DOUBLER
6	D2757	OUTER DOUBLER
96	M7885/2	RIVET
126	M7885/3	RIVET
24	AN4-6A	BOLT
24	AN960JD416	WASHER
24	80-007-15-4A	INSERT - DOME HEAD

## 7 HARDPOINT LOAD LIMITS (REFERENCE ONLY)

The maximum limit loads on the Hardpoint Kit are 500 lb vertical load and 280 lb radial horizontal load for each individual hardpoint. The radial horizontal and vertical loads may be applied simultaneously. Any equipment attached to the hardpoints **shall not exceed these loads**.

## 8 CARGO HOOK LIMITATIONS (REFERENCE ONLY)

Loads applied to the Dart Hardpoint Kit Installation will limit the load carrying capacity of the cargo hook according to the following Figure. When the hardpoints are loaded to their maximum capacity, outlined in section 7 of this document, the cargo hook is limited to carrying a maximum load of 1850 lb.

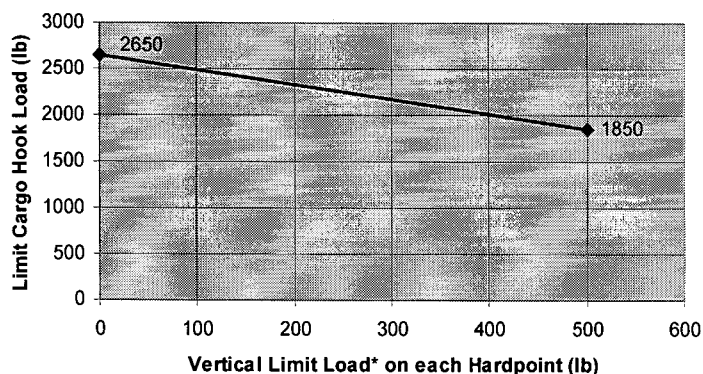


Figure 5 - Cargo Hook Limitations for Hardpoint Loads

\* The Vertical Limit Load on each Hardpoint refers to the maximum allowable vertical limit load for a single hardpoint only. The 500 lb vertical limit load indicated in Figure 5 implies a maximum radial horizontal load of 280 lb, according to section 7 of this document. These limit loads should not be exceeded.

Revision : B  
Date : 98.04.29